

Sustainability Appraisal and SEA of North Hertfordshire Local Plan Preferred Options

Appendix 6: Strategic housing options - summaries and matrices

November 2014

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Strategic housing options – overview and document history

Strategic housing options were initially identified, appraised and consulted on in February 2013¹. These identified large strategic sites which could contribute to delivering the majority of the District's housing growth. Additional strategic sites (North of Baldock (BA1) and North East of Luton (EL3 (previously 212a) and 212b and 212c)) were identified, appraised and consulted on in July 2013².

The full matrices for the strategic options relating to specific sites were reviewed in September 2014, to identify any changes required as a result of new information or changes in information, and to correct mistakes. This review was undertaken to support the process of choosing the preferred strategic options.

¹ See [Housing Options Growth Levels and Locations 2011 – 2031](#)

² See [Housing Additional Locations Options](#)

Summaries

The following table summarises the conclusions of the appraisal of strategic housing options undertaken in February 2013 and July 2013 and updated in September 2014. The appraisal options considered included site combinations and large individual sites, and for individual sites the table gives their number and whether or not they were taken forward to preferred option. The purpose of this appraisal was to inform the development of the spatial strategy now included in the Local Plan Preferred Options report. Individual site appraisals are also shown in Appendix 7 and 8.

Detailed matrices, also updated in September 2014 are included in the section which follows.

Option	Strengths	Weaknesses
<p>Feb 2013 Option 4: South West of Hitchin</p> <p>(Site SWH – not taken forward)</p>	<ul style="list-style-type: none"> • A site this size is likely to be able to provide significant facilities within the development, including employment. • Opportunity for greenspace provision • Site is likely to be able to support additional bus services. • The proposed bypass associated with the development could alleviate transport issues through the town (especially HGV), having a positive impact on noise and air pollution in the town . • Development would provide 6000-7400 dwellings in North Hertfordshire, including significant affordable housing. • Significant opportunities for sustainable energy, given the size of the development 	<ul style="list-style-type: none"> • Greenfield site, agricultural grade 3. • The site is on the far side of Hitchin from the train station, and it is likely to result in increased commuting by private car. • The site includes areas of high landscape sensitivity and borders the AONB. • Site contains a number of wildlife sites and a SSSI, and is adjacent to Oughton Head / Charlton Mill Pool. • Site contains several designated archaeological areas, and borders two conservation areas. • The site borders a major Public Water Supply at Oughton Head. • Parts of the site are above Source Protection Zones 1, 2 and 3 and the site is likely to include contaminated land. • Site contains parts of the River Hiz at Wellhead, classified as functional floodplain.

Option	Strengths	Weaknesses
		<ul style="list-style-type: none"> Initial construction phase would be disruptive for surrounding local residential areas. A development of this size would inevitably involve increased light, air and noise pollution. Services could compete with town centre.
<p>Feb 2013 Option 5: North of Letchworth</p> <p>(Site LG1 (previously NL) - included in preferred options)</p>	<ul style="list-style-type: none"> Will provide 1000 dwellings, including opportunities for a high proportion of affordable housing. Adjacent to existing greenspace, provides key opportunity for enhancement and improvement of links into the countryside, to connect new and existing green infrastructure with that in Bedfordshire. Regular bus services within 400m of parts of the site. A site of this size may be able to fund improvement to the bus services. Opportunity to improve biodiversity Opportunity for sustainable energy solutions onsite Development could help regenerate deprived areas 	<ul style="list-style-type: none"> Greenfield development, site is grade 2 agricultural land, including part of the greenway Open countryside would be further away for existing residents Site is over 1km from Letchworth station and the town centre. Site is likely to exacerbate local traffic, as residents use private cars for commuting and accessing services. Site is exposed, and development could impact on existing expansive views Part of site designated area of archaeological interest Potential surface water flooding issues onsite Initial construction phase would be create noise and other disruption for surrounding local residential areas. Development of this large greenfield site will inevitably involve increased light, air and noise pollution.
<p>Feb 2013 Option 6: East of Luton</p> <p>(Sites EL1 and EL2 (previously</p>	<ul style="list-style-type: none"> Site would provide 1000 – 1400 additional dwellings in North Hertfordshire including significant affordable housing. Some of this is likely to serve residents currently living in deprived areas of Luton. A site of this size is likely to be able to provide significant facilities within the 	<ul style="list-style-type: none"> This is a greenfield site, agricultural land grade 3 Site includes designated archaeological area Area provides well used and valued recreation space for existing residents of Luton and Cockernhoe and other villages. The site is a long distance from the Luton town

Option	Strengths	Weaknesses
<p>parts of EL) - included in preferred options)</p>	<p>development, including bus links and could be linked with new employment opportunities</p> <ul style="list-style-type: none"> • Opportunity to provide additional greenspace and connect historic parks and gardens into public footpaths and into existing Green Link heading east toward Stevenage. • Potential for habitat creation as part of the development • Significant opportunities for sustainable energy solutions onsite. 	<p>centre and the topography is undulating, which would be a discouragement to walking or cycling into the town.</p> <ul style="list-style-type: none"> • The site is over 3km from Luton station, so residents are likely to use private vehicles to commute and access services in Luton. • A site of this size and scale in this location is likely to have a significant impact on the landscape character and on local villages. Site is close to AONB. • Site includes part of Mangrove Green and Cockernhoe archaeological area. Site also close to Putteridge Bury, a designated Historic Park and Garden. • Site includes woodland, hedgerows, and grassland, and will surround Brickkiln Wood. It is also 100m from Stubbocks Wood wildlife site. • Site likely to include some contamination from previous landfill use and is partly located in Source Protection Zone 3. • Possible constraints on sewerage treatment infrastructure. • Potential surface water flooding issues onsite. • Constraints on use of SuDS • The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment • Initial construction phase would be likely to create noise and other disruption for surrounding local residential areas. • Development of this large greenfield site will inevitably involve increased light, air and noise pollution. • The site is very close to Luton noise contours.

Option	Strengths	Weaknesses
<p>Feb 2013 Option 7: Rush Green</p> <p>(Site RG - not taken forward)</p>	<ul style="list-style-type: none"> • Provides opportunity for remediation of existing scrapyards. • Rights of way run through and close to the site, and provide access to open countryside. • Site would provide 350 dwellings, with the opportunity to deliver affordable housing in a rural location. • Opportunities for sustainable energy. 	<ul style="list-style-type: none"> • It is unlikely that a site of this size and in this location would deliver the required services and facilities to meet the needs of an entire settlement. The remoteness of the site means that residents would be highly dependent on cars. • Site is likely to be contaminated and part is above Source Protection Zone 3. It also contains a watercourse • Site surrounded by areas of high landscape sensitivity. • Surface water flood risk issues identified onsite. Site contains Flood zone 2 and 3 as a tributary of the River Purwell flows through the site. • The site is not close to an existing urban area offering services and facilities to support growth.
<p>Feb 2013 Option 8: North of Stevenage</p> <p>(Site NS (previously NS1) – included in preferred options)</p>	<ul style="list-style-type: none"> • A site of this size is likely to be able to provide significant facilities within the development • Development would provide 1000 -1700 dwellings in North Hertfordshire including significant affordable housing • Significant opportunities for sustainable energy, given the size of the development. • Green space would be provided for within the development and there are opportunities to enhance existing green space nearby as well as create links into the Stevenage Greenway Letchworth Greenway. • Currently within 200m of a regular bus route, although new bus stops would be required as part of the development. 	<ul style="list-style-type: none"> • This is a greenfield site, agricultural land grade 3. • The 2011 Landscape Study describes developments of greater than 5ha as not appropriate for this area. • Development would extend to within 400m of Graveley village and be likely to have a significant impact on views from the village and its distinctiveness as a settlement. • A designated wildlife site is adjacent to one corner of the area. • Potential impacts on the setting of Graveley Conservation area and listed buildings. • Part of the sites is in Source Protection Zone 3 • There are significant constraints on sewerage infrastructure in Stevenage. • Potential surface water flooding issues onsite • It is likely that a significant proportion of new

Option	Strengths	Weaknesses
		<p>residents would work outside Stevenage and travel by car. Stevenage station is over 3km from the site.</p> <ul style="list-style-type: none"> Initial construction phase would be create noise and other disruption for surrounding local residential areas. Development on this large greenfield site will inevitably involve increased light, air and noise pollution.
<p>Feb 2013 Option 9: North East of Stevenage</p> <p>(Site NES – not taken forward (though a small part of this option was carried forward as GA2))</p>	<ul style="list-style-type: none"> A site of this size is likely to be able to provide significant facilities within the development; The development would provide 2000 - 5700 dwellings in North Hertfordshire including significant affordable housing; and There will be significant opportunities for sustainable energy, given the size of the development. 	<ul style="list-style-type: none"> This is a greenfield site, agricultural land grade 3. The 2011 Landscape Study describes developments of greater than 5ha as not appropriate for this area. The requirement for a dual carriageway to serve this major development would be visible from the surrounding area, this would have a particularly negative impact on landscape. Designated wildlife sites are included in the development area Designated archaeological sites within the proposed site Setting of historic assets impacted by possible access road Possible contamination on site, and located in Source Protection Zone 2. Surface water flooding an issue and there are constraints on the use of SuDS There are significant constraints on sewerage infrastructure in Stevenage. Development of this large greenfield site would inevitably involve increased light, air and noise pollution. Initial construction phase would be disruptive for surrounding local residential areas.
<p>Feb 2013 Option 10:</p>	<ul style="list-style-type: none"> A site of this size is likely to be able to provide significant facilities within the 	<ul style="list-style-type: none"> This is a greenfield site, agricultural land grade

Option	Strengths	Weaknesses
<p>West of Stevenage</p> <p>(Sites WS1 and WS2 (previously parts of WS) safeguarded for housing in preferred options)</p>	<p>development.</p> <ul style="list-style-type: none"> • If developed in could provide 1,700 - 3100 dwellings in North Hertfordshire including significant affordable housing. • The site would include provision for employment, would also provide additional workforce for Gunnels Wood employment area. • There would be significant opportunities for sustainable energy, given the size of the development. • Greenspace is within 400m, and there would be significant opportunities for green infrastructure improvements. 	<p>3.</p> <ul style="list-style-type: none"> • It is likely that a significant proportion of new residents would work outside Stevenage and travel by car. • The 2011 Landscape Study describes the capacity for developments of greater than 5ha as moderate. • Site includes a designated area of archaeological interest. • Designated wildlife sites are included in the development area, and Knebworth Woods SSSI is located to the south. • Part of site is within groundwater Source Protection Zone 2 and part above SPZ 3. • Potential surface water flooding issues onsite and the southern edge of the site brushes flood zone 3. • Potential contamination from former landfill use • There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads Water Cycle Study identifies potential solutions. • Site adjacent to A1(M), there may need to be noise attenuation in some areas and development to be an appropriate distance in relation to air quality and noise. For parts of the development away from the A1(M), there is likely to be increased light, air and noise pollution.

Option	Strengths	Weaknesses
<p>July 2013 additional strategic option: North of Baldock</p> <p>(site BA1 (formerly site 200)- included in preferred options)</p>	<ul style="list-style-type: none"> • Will provide over 2800 dwellings, a significant proportion of which will be affordable housing • The southern part of the site is within 400m of a bus stop and 800m of train station, and a development of this size is likely to be able to support an improved bus service. • The scale of the development will mean open space is provided onsite. It will give opportunities to improve and expand existing rights of way and adjacent green links • Significant opportunities for sustainable energy measures, given the size of the development. • Additional residents would support local services and facilities, and the town centre. The development is also likely to be required to provide new facilities such as schools, nurseries, shops and a community centre. 	<ul style="list-style-type: none"> • Incorporates land previously identified for employment uses, although development of this scale could still incorporate some employment uses. • Large greenfield site grade 2/3 agricultural land • The site contains Baldock Road Verge Wildlife site and includes hedgerows and trees • Site will reduce access to countryside for north Baldock residents. • A development of this size is likely to have significant impact. The 2013 Landscape Sensitivity Report identifies the areas to the north of Bygrave Road as having moderate to high sensitivity and areas adjacent to the railway line as having moderate to low sensitivity. • Includes 4 designated areas of archaeological significance, and is adjacent to Ivel Springs Ancient Monument. • Some of site is adjacent to the railway line, with potential noise and vibration issues. • Railway line creates barrier with the rest of the town for pedestrian and cycle access. • Potential surface water flooding issues onsite • Potential contamination from multiple industrial uses. • Initial construction phase would create noise and other disruption for surrounding local residential areas. • Development of this large green field site will inevitably involve increased light, air and noise pollution.

Option	Strengths	Weaknesses
<p>July 2013 additional strategic option: part of North East of Luton</p> <p>(Site EL3 (previously 212a – included in preferred options</p>	<ul style="list-style-type: none"> • Site would provide 700 additional dwellings in North Hertfordshire including significant affordable housing • Green space is within 400m of the site. • Opportunity for sustainable energy solutions onsite in conjunction with EL1 and EL2. • A site of this size is likely to be able to provide significant facilities within the development. • Opportunity to connect historic parks and gardens into public footpaths and into existing Green Link heading east toward Stevenage. 	<ul style="list-style-type: none"> • This is a greenfield site, agricultural land grade 3. • Site includes designated archaeological area • The area provides recreation space for existing residents of Luton, Cockernhoe. • A site of this size and scale in this location is likely to have a significant impact on the landscape character and on local villages. • Constraints on use of SuDS. • Potential surface water flooding issues onsite. • The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment • Local road network to the east is sub-standard, development in this area will make this worse, and reduce accessibility for existing residents. • Initial construction phase would be likely to create noise and other disruption for surrounding local residential areas. • Development of this large greenfield site will inevitably involve increased light, air and noise pollution.

Option	Strengths	Weaknesses
<p>July 2013 additional strategic option: part of North East of Luton</p> <p>(sites 212b and 212c, not carried forward)</p>	<ul style="list-style-type: none"> • Site 212c would provide 600 additional dwellings in North Hertfordshire, including affordable housing • Site 212b would provide significant greenspace and opportunity for wider links to green infrastructure, with and improvements to biodiversity • Opportunity for sustainable energy solutions if linked with other east of Luton developments A site of this size is likely to be able to provide significant facilities within the development. • • 	<ul style="list-style-type: none"> • This is a greenfield site, agricultural land grade 3 • Both sites include designated archaeological area • Site borders Putteridge Bury Historic Park and Gardens • The area provides recreation space for existing residents of Luton, Cockernhoe. • A site of this size and scale in this location is likely to have a significant visual impact on landscape. The site is located on top of the plateau ridge and so will impact on surrounding views of the site, particularly from Lilley Bottom. • Constraints on use of SuDS. • Potential surface water flooding issues onsite. • The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment. • Local road network to the east is sub-standard, development in this area will make this worse, and reduce accessibility for existing residents. • Initial construction phase would be likely to create noise and other disruption for surrounding local residential areas. • Development of this large greenfield site will inevitably involve increased light, air and noise pollution.

Strategic housing options matrices

Option 4: South West of Hitchin

SA Objective: Will the policy...	Score	Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	√ √	The development is likely to include a neighbourhood centre and separate employment land, providing jobs and services to support the local community.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	X X	The development is located on a greenfield site, which includes some highly valued landscapes and environments including Oughtonhead Common Site is located upon grade 3 agricultural land
2b. Provide access to green spaces?	√	A development of this size and scale would provide new greenspace provision and would therefore bring greater access to these facilities. Access to the countryside would be further away for existing residents. Greenspace within 400m. Rights of Way run through the site. Mitigation – apply green space standards to ensure positive benefit for greenspace.
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	?	A development of this size is likely to be able to provide significant facilities and services to meet requirements of a new population and reduce the need to travel, that said not all residents are likely to work in Hitchin and so commuting is likely. The site is on the far side of Hitchin from the train station. Parts of the site are within 200m of a bus stop, however new bus stops will be required as part of the development. The potential traffic impacts from the site are unclear. The proposed bypass associated with the development could alleviate transport issues through the town (especially

		<p>HGV),having a positive impact on noise and air pollution in the town although traffic associated with large number of homes is likely to increase the level of local traffic. Potential unknown impact associated with Luton airport expansion, adding west to east movements.</p> <p>Mitigation - inclusion of sustainable transport measures</p>
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	X X	<p>Site contains Oughton Head Lane SSSI. Site also contains Priory Park / Pirton Road Allotments and The Willows County Wildlife sites and is adjacent to Oughton Head / Charlton Mill Pool. There is potential for a significant negative impact.</p> <p>Mitigation – detailed consideration of SSSI and wildlife sites to ensure that sites do not become fragmented as some sites are likely to be completely surrounded by development. Habitat study required to consider how to mitigate impact on the wildlife. Retain existing trees and hedgerows and seek opportunities to benefit biodiversity through development.</p>
3b. Protect and enhance landscapes?	X X	<p>A site this size is likely to have a significant landscape impact. The site is located mainly within Landscape Character Area 214 Langley Valley. The 2011 landscape evaluation for this area³describes development of greater than 5ha as not appropriate, and the capacity for urban extensions development as low. The site borders the AONB to west. The 2012 LUC study⁴ identifies areas of high sensitivity north of the A505 and of moderate to high sensitivity between the A505 and the B656.</p> <p>Mitigation: development should be restricted toward the boundary of the AONB. Production of landscape assessments will aid with design.</p>
3c. Conserve and, where appropriate, enhance the historic environment?	X X	<p>The development is likely to negatively impact on the Charlton Conservation area. The site also adjoins Hitchin Conservation area and the boundary incorporates the curtilage of the Priory. Site also contains several designated archaeological areas, including Foxholes</p>

³ See ww.north-herts.gov.uk/214_2011-2.pdf

⁴Land south west of Hitchin: Landscape sensitivity study December 2012, see http://www.north-herts.gov.uk/south_west_of_hitchin_all.pdf

		Archaeological Area. Mitigation – Archaeological survey of site and surrounding area / Ensure that development is in keeping with local character, e.g. building materials, style, height.
3d. Reduce pollution from any source?	X X	Parts of the site are above Source Protection Zones 1, 2 and 3 and the site is likely to be affected by contamination, based on it containing a landfill. The site borders a major Public Water Supply at Oughton Head (situated just north of the development). Environment Agency have not identified any absolute constraints associated with the urban extension, although identify the requirement for additional work in relation to capacity of the Hitchin STW.
<i>Climate change</i>		
4a. Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change?	√	Site contains parts of the River Hiz at Wellhead, and so contains some land classified as functional floodplain. SuDS likely to be viable according to the SuDS viability Plan. Significant opportunities for sustainable energy , given the size of the development Mitigation – Sequential and exception tests for flood risk areas
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	X	Concentrating this scale of development in one area of the district would not spread the benefits of development widely across the district, however this site does provide the opportunity to help tackle deprivation in Hitchin. Affordable housing will open up opportunities for those not able to afford market housing
5b. Increase access to decent and affordable housing?	√√	Development would provide 6000 – 7400 dwellings in North Hertfordshire, with a proportion being affordable.
5c. Improve conditions and services that engender good health and reduce health inequalities?	X	Initial construction phase would be disruptive for surrounding local residential areas. There would need to be controls to minimise this disruption. Development on a greenfield site will result in a loss of tranquillity for the area. New development will inevitably involve increased light, air and noise pollution. These impacts

		will need to be managed with appropriate mitigation measures
<i>Resource use and waste</i>		
6a. Use natural resources efficiently; reuse, use recycled where possible.	?	Limiting the impact on natural resources will be important. Measures could include SUDs, recycling, sewage infrastructure, sustainable construction and building methods. Environment Agency have not identified any absolute constraints associated with the urban extension, although identify the requirement for additional work in relation to capacity of the Hitchin STW. A large new housing development will put increased pressure on the sewerage and water supply infrastructure. Mitigation – ensure water efficiency in new development and use of SuDs
<i>Town centres</i>		
7. Promote sustainable urban living?	X ?	Site is located on the edge of Hitchin, but has the potential to complement local services and facilities in the town centre, although development a new centre could also compete. On the positive side, the development would be of an appropriate size to offer facilities such as schools, shops, community centres which would promote sustainable living.
Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> • A site this size is likely to be able to provide significant facilities within the development, including employment. • Opportunity for greenspace provision • Site is likely to be able to support additional bus services. • The proposed bypass associated with the development could alleviate transport issues through the town (especially HGV), having a positive impact on noise and air pollution in the town . • Development would provide 6000- 7400 dwellings in North Hertfordshire, 	<ul style="list-style-type: none"> • Greenfield site, agricultural grade 3. • The site is on the far side of Hitchin from the train station, and it is likely to result in increased commuting by private car. • The site includes areas of high landscape sensitivity and borders the AONB. • Site contains a number of wildlife sites and a SSSI, and is adjacent to Oughton Head / Charlton Mill Pool. • Site contains several designated archaeological areas, and borders two conservation areas. • The site borders a major Public Water 	<ul style="list-style-type: none"> • Application of greenspace standards to ensure positive outcome • sustainable transport measures including provision of bus stops • habitat study required to consider how to mitigate impact on the wildlife • development restricted towards AONB. Production of landscape assessments. • archaeological survey • sequential / Exception tests for flood risk areas • noise, air and light pollution mitigation • water efficiency and SuDS; • Construction Management Plan; and

<ul style="list-style-type: none"> including significant affordable housing. Significant opportunities for sustainable energy, given the size of the development 	<p>Supply at Oughton Head.</p> <ul style="list-style-type: none"> Parts of the site are above Source Protection Zones 1, 2 and 3 and the site is likely to include contaminated land. Site contains parts of the River Hiz at Wellhead, classified as functional floodplain. Initial construction phase would be disruptive for surrounding local residential areas. A development of this size would inevitably involve increased light, air and noise pollution. Services could compete with town centre. 	<ul style="list-style-type: none"> appropriate scale facilities, so not to compete with town centre.
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Option 5: North of Letchworth

SA Objective: Will the policy...	Score	Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	0	Site will not include employment provision.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	X X	Site includes part of the greenway that will require diversion. It is in a location on the edge of Letchworth that provides access to the countryside for existing residents. Site located on Grade 2 agricultural land.
2b. Provide access to	√	Development unlikely to provide a huge amount of provision onsite other than amenity

green spaces?		<p>based on proximity to Grange Recreation field, however this provides opportunity for enhancement. Site incorporates Letchworth Greenway. Provides key opportunity for enhancement and improvement of links into the countryside. A key opportunity is to connect new and existing green infrastructure with that in Bedfordshire, notably the Ivel Valley and communities in Stotfold, Arlesey and Fairfield Park</p> <p>Green space within 400m of the site, rights of way cross the site. Open countryside would be further away for existing residents, but open space access would remain the same.</p> <p>Mitigation – apply green space standards to ensure positive benefit for greenspace, and protect and enhance Greenway.</p>
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	X	<p>A site of this size could provide additional facilities, although more likely to be an extension to the Grange, which has a neighbourhood centre. Site is over 1km from Letchworth station, but there are regular bus services within 400km of parts of the site. Site is likely to exacerbate local traffic, as residents use private cars for commuting and accessing services.</p> <p>Mitigation - inclusion of sustainable transport measures.</p>
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	?	<p>Site is mainly open fields, but includes hedgerows and scrub margins. Approx 500m from District Wildlife Site at Norton Pond.</p> <p>Mitigation – detailed ecological surveys and appropriate mitigation measures, including retention of hedgerows to retain green corridors, to ensure that the impact on ecology is minimised.</p>
3b. Protect and enhance landscapes?	X	<p>The 2013 Landscape Sensitivity Study⁵ assesses the sensitivity of the site as a combination of low and low to moderate. It notes that the site is exposed, and development could impact on existing expansive views. It includes a number of recommendations to conserve elements of rural views and promote and enhance the landscape’s open rural character.</p>

⁵ Land Use Consultants Jan 2013. See http://www.north-herts.gov.uk/letchworth_north_study.pdf

		Mitigation – landscape assessments to minimise the impact on the countryside and enhance and protect the quality of the landscape. Advanced planting is required.
3c. Conserve and, where appropriate, enhance the historic environment?	X	Site includes an Archaeological Area West of Norton Bury. Mitigation – Archaeological survey of site and surrounding area
3d. Reduce pollution from any source?	0	. Site is not adjacent to a watercourse although a tributary of the River Ivel is located within 350m.
<i>Climate change</i>		
4. Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change?	√	Potential surface water flooding issues onsite and constraints on the use of SuDS Mitigation – Surface Water Management Plan Opportunities for sustainable energy initiatives, given the size of the development.
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	√	The potential for delivery of variability on this site provides the opportunity to support regeneration of deprived areas.
5b. Increase access to decent and affordable housing?	√ √	The land ownership provides the opportunity to deliver a higher proportion of affordable housing than on other sites.
5c. Improve conditions and services that engender good health and reduce health inequalities?	x/0	Initial construction phase would be disruptive for surrounding residents, although some of site will be adjacent to the grange. No evidence of noise constraints close to site.
<i>Resource use and waste</i>		
6. Use natural resources efficiently;	?	Limiting the impact on natural resources will be important. Measures could include SuDS, recycling, sewage infrastructure, sustainable construction and building methods

reuse, use recycled where possible		Further investigation needed to establish capacity of the Letchworth Sewage Treatment Works. Mitigation – ensure water efficiency in new development and examine feasibility of the use of SuDS
<i>Town centres</i>		
7. Promote sustainable urban living?	X?	Depending on access and how the development relates to Letchworth. Traffic issues already exist in the Grange. An additional access (onto Stotfold Road) would reduce traffic congestion but would mean the development faces away from the existing town, which may not be sustainable.

Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> • Will provide 1000 dwellings, including opportunities for a high proportion of affordable housing. • Adjacent to existing greenspace, provides key opportunity for enhancement and improvement of links into the countryside, to connect new and existing green infrastructure with that in Bedfordshire. • Regular bus services within 400km of parts of the site. A site of this size may be able to fund improvement to the bus services. • Opportunity to improve biodiversity • Opportunity for sustainable energy solutions onsite • Development could help regenerate deprived areas • Parts of the development are within 	<ul style="list-style-type: none"> • Greenfield development, site is grade 2 agricultural land, including part of the greenway • Open countryside would be further away for existing residents • Site is over 1km from Letchworth station and the town centre. • Site is likely to exacerbate local traffic, as residents use private cars for commuting and accessing services. • Site is exposed, and development could impact on existing expansive views • Part of site designated area of archaeological interest • Potential surface water flooding issues onsite • Initial construction phase would be create noise and other disruption for 	<ul style="list-style-type: none"> • Implementation of greenspace standards and connect new and existing green infrastructure with that in Bedfordshire; • sustainable transport measures; • ecological assessment • advanced planting and landscape study; • water efficiency and SuDS; • Surface Water Management Plan • Construction Management Plan and • potential need for additional access, but ensuring that development doesn't face away from town

400m of a regular bus service, though there is an opportunity to provide additional services in a development of this size.	surrounding local residential areas.	
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Option 6: East of Luton

SA Objective: Will the policy...		Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
	Score	
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	?	If Century Park is developed, there is potential for employment development in conjunction with housing, however, this development on its own does not incorporate any employment land.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and	XX	Greenfield site, majority is grade 3 agricultural land. This area is considered to have generally high landscape quality based on its proximity to the AONB. The area is accessible for local residents and is well used.

amenity value?		
2b. Provide access to green spaces?	?	<p>The large, out of settlement location of this site is likely to provide opportunities for providing additional greenspace, however it is developing on accessible greenspace in the first instance. The area is well used and valued by local residents, and development would mean that access to the countryside would be further away for existing residents. Existing greenspace is within 400m of the site, and rights of Way run through the site.</p> <p>Mitigation – apply green space standards to ensure positive benefit for greenspace. Ensure protection of existing footpath through the site. There is an opportunity to connect historic parks and gardens into public footpaths and into existing Level 2 Green Link heading east toward Stevenage.</p>
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	X	<p>A site of this size is likely to be able to provide significant facilities within the development, including bus links, and could be linked with new employment opportunities. However, the site is a long distance from the Luton town centre and the topography is undulating, which would be a discouragement to walking or cycling into the town. The site is over 3km from Luton station, so residents are likely to use private vehicles to commute and access services in Luton.</p> <p>Mitigation - inclusion of sustainable transport measures.</p>
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	?	<p>The site is adjacent to Stubbocks Wood Wildlife site. The Environmental Statement submitted alongside the planning applications identifies that existing habitats are predominantly arable fields with hedgerows, along with patches of woodland and semi improved grassland areas across site. The development would include Brickkiln Wood (not designated). Habitat creation proposed as part of the plan, but there is likely to be</p>

		<p>an initial negative impact in the short term.</p> <p>Mitigation – retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development. Detailed ecological surveys and appropriate mitigation measures, including wildlife corridors, to ensure that the impact on ecology is minimised.</p>
3b. Protect and enhance landscapes?	X X	<p>A site of this size and scale in this location is likely to have a significant visual impact on landscape, as well as on local villages. The site is located on top of the plateau ridge and so will impact on surrounding views of the site, and will lead to the coalescence of Luton with nearby villages. The site is located within Landscape Character Area 202 Breachwood Green Ridge, which is considered in the 2011 landscape assessment⁶ to have a moderate sensitivity. However the study also suggests that the landscape capacity for urban extensions greater than 5ha is low to moderate. The site is also close to the AONB.</p> <p>Other landscape studies have also been undertaken of the proposed development area (including sites EL1, EL2 and EL3), in particular a LUC report in 2008⁷ and a review of the LUC report in 2009. The 2009 report notes that development of the scale proposed would have significant impacts on the landscape character and the visual and recreational resource, as well as local villages. The proposed extent of the development has since been reduced, and in particular the proposed development area is now set below the ridge line visible from Lilley Bottom in order to avoid devaluing the quality of the Lilley Bottom Character Area. However, it is still likely that development of this scale will have a significant impact on the landscape.</p> <p>Mitigation – landscape assessments to minimise the impact on the countryside and enhance existing landscape features and pattern, taking account as far as possible of</p>

⁶ See http://www.north-herts.gov.uk/202_2011.pdf

⁷ The first report was Environmental Sensitivity Assessment Supplementary Report (LUC December 2008) and this was reviewed in 2009 by the Landscape Partnership – see http://www.north-herts.gov.uk/east_of_luton_final_report_all.pdf

		the guidelines in the 2011 study.
3c. Conserve and, where appropriate, enhance the historic environment?	X	Site includes part of Mangrove Green and Cockernhoe archaeological area. Site also close to Putteridge Bury. Mitigation - Archaeological survey of the site and surrounding area.
3d. Reduce pollution from any source?	X	Site likely to be contaminated. Site above SPZ 3 but not adjacent to a watercourse.
<i>Climate change</i>		
4 Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change?	√	Potential surface water flooding issues onsite. There are constraints on the use of SuDS according to the SUDS viability plan, however other alternatives for SuDS should be sought. There are significant opportunities for sustainable energy for the combined development of EL1, EL2 and EL3, given the size of the development. Mitigation – actively encourage sustainable energy solutions onsite, and review options for SuDS. Produce Surface Water Management Plan.
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	√	Site is poorly related to Luton and North Hertfordshire, although is likely to provide affordable housing for residents currently living in deprived areas of Luton in the medium to long term.
5b. Increase access to decent and affordable	√√	Site would provide 1,000 - 1400 houses in North Hertfordshire a significant proportion of which would be affordable.

housing?		
5c. Improve conditions and services that engender good health and reduce health inequalities?	X	<p>Initial construction phase would be disruptive for surrounding residents, The site is very close to Luton noise contours.</p> <p>Development of this large greenfield site will inevitably involve increased light, air and noise pollution.</p> <p>Mitigation: Construction Management Plan. Review noise impacts on potential residents, and incorporate mitigation within development.</p>
<i>Resource use and waste</i>		
6. Use natural resources efficiently; reuse, use recycled where possible	?	<p>Site is likely to be served by Luton East Hyde STW. The Environment Agency has identified that the STW is constrained on all sides. Should upgrades be required, this is a constraint to development. Not currently clear if upgrades are required or not.</p> <p>It will be important to ensure that water efficiency measures are included within the development to reduce the impact on available water resources.</p> <p>Mitigation - Further discussion with EA and Water companies</p> <p>Mitigation – ensure water efficiency in new development</p>
<i>Town centres</i>		
7. Promote sustainable	X	Site unlikely to contribute to town centre based on its out of town location, although

urban living?		there are local centres in closer proximity that it may serve.
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Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> • Site would provide 1000 – 1400 additional dwellings in North Hertfordshire including significant affordable housing. Some of this is likely to serve residents currently living in deprived areas of Luton. • A site of this size is likely to be able to provide significant facilities within the development, including bus links and could be linked with new employment opportunities • Opportunity to provide additional greenspace and connect historic parks and gardens into public footpaths and into existing Green Link heading east toward Stevenage. • Potential for habitat creation as part of the development • Significant opportunities for sustainable energy solutions onsite. 	<ul style="list-style-type: none"> • This is a greenfield site, agricultural land grade 3 • Site includes designated archaeological area • Area provides well used and valued recreation space for existing residents of Luton and Cockernhoe and other villages. • The site is a long distance from the Luton town centre and the topography is undulating, which would be a discouragement to walking or cycling into the town. • The site is over 3km from Luton station, so residents are likely to use private vehicles to commute and access services in Luton. • A site of this size and scale in this location is likely to have a significant impact on the landscape character and on local villages. Site is close to AONB. • Site includes part of Mangrove Green and Cockernhoe archaeological area. Site also close to Putteridge Bury, a designated Historic Park and Garden. • Site includes woodland, hedgerows, and grassland, and will surround Brickkiln Wood. It is also 100m from Stubbocks Wood wildlife site. • Site likely to include some contamination from previous landfill use and is partly located in Source Protection Zone 3. 	<ul style="list-style-type: none"> • Use of SuDS or alternatives throughout development; • apply green space standards to ensure positive benefit for greenspace provision; • archaeological survey of the site and surrounding area; • inclusion of sustainable transport measures • actively encourage sustainable energy solutions onsite, and review options for SuDS. • produce Surface Water Management Plan; • work with EA and Water companies re Sewage Treatment Works; • retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development • consideration of noise contours from Luton airport; and • Require water efficiency in development.

	<ul style="list-style-type: none"> • Possible constraints on sewerage treatment infrastructure. • Potential surface water flooding issues onsite. • Constraints on use of SuDS • The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment • Initial construction phase would be likely to create noise and other disruption for surrounding local residential areas. • Development of this large greenfield site will inevitably involve increased light, air and noise pollution. • The site is very close to Luton noise contours. 	
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Option 7: Rush Green

SA Objective: Will the policy...	Score	Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	0	The site would essentially create a free-standing rural settlement, in the form of a new village. This site would essentially provide a large workforce in a settlement without any employment development and no proximate employment land.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and	√ √	Development of this site would improve the existing environmental value of the land, based on its current use as a scrap yard. The site currently has little amenity value and is classified as brown field.

other land with high environmental and amenity value?		
2b. Provide access to green spaces?	?	There is little opportunity for onsite green space provision, based on the size of the site. There is a small amenity greenspace within 400m, but this is too small to serve the development. Rights of way run close to the site, and provide access to open countryside.
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	X X	The remoteness of the site means that all the majority of movement would be by car. It is unlikely that a site of this size and in this location would deliver the required services and facilities to meet the needs of an entire settlement. Mitigation - inclusion of sustainable transport measures as this site is considered particularly unsustainable in transport terms.
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	?	Site is adjacent to Rush Green Airfield Wildlife Site. Development of the site for residential purposes will be preferable to the existing land use therefore creating a potential improvement in biodiversity value, although brownfield sites provide unusual habitat opportunities for some species. Mitigation – detailed ecological surveys and appropriate mitigation measures to ensure that the impact on ecology is minimised and opportunities are maximised.
3b. Protect and enhance landscapes?	X	A site of this size and scale in this location is likely to have a significant visual impact on landscape. The physical environment would be improved through development of the site however the sites location on the valley floor will be prominent from certain directions. A degree of buffering and screening is present from the existing use, however in visual terms the site is located in Landscape Character Area 214 Langley Valley, which has moderate to high sensitivity. The site is likely to be classified as low sensitivity, but surrounded by areas of high sensitivity. Mitigation – Existing screening should be maintained and improved. Landscape assessments to minimise the impact on the countryside and aid with design.
3c. Conserve and, where appropriate,	0	Site is not located within an area of archaeological interest or conservation and unlikely to have any impact on the setting of the historic built environment.

enhance the historic environment?		
3d. Reduce pollution from any source?	X	<p>Site is likely to be contaminated and part is above Source Protection Zone 3. It also contains a watercourse. Site provides the opportunity to reduce potential pollution through remediation.</p> <p>Mitigation – Remediation of the site will be an important part of the sites potential development Mitigation - Further discussion with EA and Water companies</p>
<i>Climate change</i>		
4. Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change?	X	<p>Site contains Flood zone 2 and 3 as a tributary of the River Purwell flows through the site. There are opportunities for sustainable energy, given the size of the development.</p> <p>Mitigation - Sequential and exception tests for flood risk areas</p>
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	0	Site is unlikely to support rural economy based on the lack of existing facilities. Only a petrol station in close proximity.
5b. Increase access to decent and affordable housing?	√ ?	Site would provide 350 dwellings, with the opportunity to deliver affordable housing in a rural location, although cost of remediation may have a negative impact on the proportion.
5c. Improve conditions and services that engender good health and reduce health inequalities?	0	Site is located away from existing settlements, no likely impact on existing population. Site is adjacent to an airfield which may create some ambient noise.
<i>Resource use and waste</i>		
6. Use natural resources efficiently; reuse, use recycled	X ?	Limiting the impact on natural resources will be important. Measures could include SUDs, recycling, sewage infrastructure, sustainable construction and building methods. Site would likely drain to Hitchin STW but may require significant investment regarding

where possible		connection although information needed from IDP re Hitchin WWTW. Mitigation – ensure water efficiency in new development	
<i>Town centres</i>			
7. Promote sustainable urban living?	X X	The site is not proximate to an existing urban area offering services and facilities to support growth. The development constitutes a new village in a rural location.	
Key positive effects		Key negative effects	Potential mitigation
<ul style="list-style-type: none"> Provides opportunity for remediation of existing scrapyards. Rights of way run through and close to the site, and provide access to open countryside. Site would provide 350 dwellings, with the opportunity to deliver affordable housing in a rural location. Opportunities for sustainable energy. 		<ul style="list-style-type: none"> It is unlikely that a site of this size and in this location would deliver the required services and facilities to meet the needs of an entire settlement. The lack of facilities and remoteness of the site means that residents would be highly dependent on cars. Site is likely to be contaminated and part is above Source Protection Zone 3. It also contains a watercourse Site surrounded by areas of high landscape sensitivity. Surface water flood risk issues identified onsite. Site contains Flood zone 2 and 3 as a tributary of the River Purwell flows through the site. The site is not close to an existing urban area offering services and facilities to support growth. 	<ul style="list-style-type: none"> Existing screening maintained and improved; inclusion of sustainable transport measures; ecological surveys and maximise opportunities; remediation important part of site delivery; sequential and exception tests for flood risk areas; and water efficiency and SuDS

Option 8: North of Stevenage

Note: part of this was taken forward as GA2

SA Objective: Will the policy...	Score	Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	0	The development is likely to include a neighbourhood centre, but no employment provision. This option is likely to contribute more to Stevenage's economy rather than North Herts.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	XX	The development is located on a greenfield site. The site is located on agricultural land grade 3.
2b. Provide access to green spaces?	√	<p>The large, edge of town location of the site is likely to provide opportunities for greenspace. Greenspace would be provided for within the development and would therefore bring greater access to these facilities. Access to the countryside would be further away for existing residents. This site is close to Chesfield Park and Forster Country in which there are opportunities to enhance these green space features through appropriate mitigation⁸. There is a possible link into Stevenage Greenway and existing Level 1 Green Links, feeding into Letchworth Greenway to the north too</p> <p>Greenspace within 400m. Rights of Way run through the site.</p> <p>Mitigation – protect public rights of way and apply green space standards to ensure</p>

⁸ See SNAP North: Landscape opportunity mapping, LUC April 2010, available at http://www.north-herts.gov.uk/4897_landscape_advice_note_final_04_28_10.pdf

		positive benefit for greenspace.
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	X	<p>A site of this size is likely to be able to provide significant facilities within the development. However, it is still likely that a significant proportion of new residents would work outside Stevenage and travel by car. However, large scale development will create opportunities for people to use local facilities close to where they live to help reduce the impact of this. It is currently within 200m of bus stops on North Road, although new bus stops would be required as part of the development. Stevenage station is over 3km from the site.</p> <p>Access through Stevenage.</p> <p>Mitigation - inclusion of sustainable transport measures.</p>
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	?	<p>A designated wildlife site abuts one edge of the site. The site is mainly arable fields, and the boundary features are likely to have the greatest ecological value and provide wildlife corridors. Greenspace improvements including wildlife corridors and a buffer to protect the wildlife site may result in a positive effect in the medium to long term.</p> <p>Mitigation – undertake habitat study to consider how to mitigate impact on the wildlife site, retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development.</p>

<p>3b. Protect and enhance landscapes?</p>	<p>X</p>	<p>A site of this size is likely to have significant landscape impact. The site straddles both the Baldock Gap and the Arlesey/Great Wymondley LCAs. In the 2011 Study⁹, Arlesey – Great Wymondley LCA is considered to be of low-moderate sensitivity, although development of this scale would still impact on the undeveloped open nature of the character area. In the 2011 study¹⁰, Baldock Gap LCA is considered to be moderate to high sensitivity, and visually of high sensitivity, views to the undeveloped skyline are an important feature within the character area and from adjacent areas.. The evaluation for both these areas LCA describes developments of greater than 5ha as not appropriate. There are opportunities to enhance the existing landscape at Forster Country and Chesfield Park, which are features that hold high amenity value.</p> <p>Development would be close to Graveley village and is likely to have a significant impact on views from the village and its distinctiveness as a settlement without appropriate mitigation measures.</p> <p>Mitigation – landscape assessments to minimise the impact on the countryside and enhance existing landscape features.</p>
<p>3c. Conserve and, where appropriate, enhance the historic environment?</p>	<p>?</p>	<p>Site is not located within an area of archaeological interest. Forster Country has been promoted by some for its historical value due to this areas connection with the writer E. M. Forster.</p> <p>Whilst not within the Graveley Conservation Area, its setting will need to be assessed and appropriate mitigations measures put in place, as not to harm this area.</p> <p>Manor Farm (grade II listed) and the Church of St Etheldreda (grade II* listed and a scheduled monument) are located to the north east of the north Stevenage area. The</p>

⁹ North Hertfordshire Landscape Study (Character, Sensitivity and Capacity) see http://www.north-herts.gov.uk/216_2011-2.pdf

¹⁰ North Hertfordshire Landscape Study (Character, Sensitivity and Capacity) see http://www.north-herts.gov.uk/219_2011-2.pdf

		<p>setting of these would need to be maintained in any development.</p> <p>Mitigation – Historic built environment assessments in advance of development</p>
3d. Reduce pollution from any source?	0	Part of the site is situated within source protection zone 3. There is no evidence of contamination.
<i>Climate change</i>		
4. Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change	√	<p>Surface water flooding has been identified as an issue for the site. The need for appropriate drainage through SuDS will be important in minimising the impact s.</p> <p>Significant opportunities for sustainable energy, given the size of the development.</p>
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	0	Site is located close to Stevenage, provides for their housing need. Affordable housing will open up opportunities for those not able to afford market housing.
5b. Increase access to decent and affordable housing?	√√	Development would provide 1000 - 1700 dwellings in North Hertfordshire with a proportion of these being affordable.
5c. Improve conditions and services that engender good health and reduce health inequalities?	X	<p>Initial construction phase would be disruptive for surrounding local residential areas in the short term. There would need to be controls to minimise this disruption.</p> <p>Development on this large greenfield site will result in a loss of tranquillity for the area. New development will inevitably involve increased light, air and noise pollution. These</p>

		impacts will need to be managed with appropriate mitigation measures.
<i>Resource use and waste</i>		
6. Use natural resources efficiently; reuse, use recycled where possible?	X	Limiting the impact on natural resources will be important. Measures could include SuDS, recycling, sustainable construction and building methods. There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads Water Cycle Study identifies potential solutions. Mitigation – ensure water efficiency in new development
<i>Town centres</i>		
7. Promote sustainable urban living?	?	Site on the edge of Stevenage, and could compete with services in the town. Located quite a distance from the main town centre, although more proximate to the old town. On the positive side, the development would be of an appropriate size to offer facilities such as schools, shops, community centres which would promote sustainable living. Development of facilities and services should be of appropriate scale, so not to compete with town centre.
Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> • A site of this size is likely to be able to provide significant facilities within the development • Development would provide 1000 -1700 dwellings in North Hertfordshire including significant affordable housing • Significant opportunities for sustainable energy, given the size of the development. 	<ul style="list-style-type: none"> • This is a greenfield site, agricultural land grade 3. • The 2011 Landscape Study describes developments of greater than 5ha as not appropriate for this area. • Development would extend to within 400m of Graveley village and be likely to have a significant impact on views from the village and its distinctiveness as a settlement. 	<ul style="list-style-type: none"> • Apply greenspace standards to ensure net benefit for greenspace • additional bus stops will be required to support sustainable transport; particularly into Stevenage • a landscape study and mitigation measures will be needed, including consideration of how to reduce impacts on Graveley ;

<ul style="list-style-type: none"> • Green space would be provided for within the development and there are opportunities to enhance existing green space nearby as well as create links into the Stevenage Greenway Letchworth Greenway. • Currently within 200m of a regular bus route, although new bus stops would be required as part of the development. 	<ul style="list-style-type: none"> • A designated wildlife site is adjacent to one corner of the area. • Potential impacts on the setting of Graveley Conservation area and listed buildings. • Part of the sites is in Source Protection Zone 3 • There are significant constraints on sewerage infrastructure in Stevenage. • Potential surface water flooding issues onsite • It is likely that a significant proportion of new residents would work outside Stevenage and travel by car. Stevenage station is over 3km from the site. • Initial construction phase would be create noise and other disruption for surrounding local residential areas. • Development on this large greenfield site will inevitably involve increased light, air and noise pollution. 	<ul style="list-style-type: none"> • undertake habitat study to consider how to mitigate impact on the wildlife site, retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development; • archaeological survey of site; • improvements to Rye Meads STW as outlined in Water Cycle Study; • high levels of water efficiency in new homes and use of SuDS; and • facilities and services of appropriate scale to prevent town centre impact; • Surface Water Management Plan; • Construction Management Plan.
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Option 9: North East of Stevenage

SA Objective: Will the policy...	Score	Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
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<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	√	Site would include provision for employment and neighbourhood centres which will provide employment. Likely to be more beneficial to Stevenage's economic prosperity than North Herts.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	X X	The site is located on Greenfield land. Weston Park is also adjacent. Site is located on Grade 3 agricultural land, although includes roads and some houses.
2b. Provide access to green spaces?	0	The large, edge of town location of this site is likely to provide opportunities for additional greenspace, however it is developing greenspace in the first instance . There is greenspace located within 400m of the site. Rights of Way run through the site. Access to the countryside would be further away for existing residents. Mitigation – apply green space standards to ensure positive benefit for greenspace.
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	X X	The site is poorly related to the existing settlement and the town centre of Stevenage. Could lead to increased traffic through Weston. A site of this size is likely to be able to provide significant facilities within the development to minimise trips generated by car for day-to-day facilities. The issue is the relationship with the town centre. It is a further distance away than Great Ashby. It is still likely that a significant proportion of new residents would work outside Stevenage and travel by car, even if some employment was provided for in the development. Mitigation - inclusion of sustainable transport measures.

<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	X X	<p>Site includes Legeside Plantation / Harbourclose Wood / Claypits wood / tilekin Wood / Tilkiln Farm / Brooches Wood / New Spring Wood/ Claypit Hills Spring Wood Wildlife site. There is a significant number of ecological sites within this area.</p> <p>Mitigation – detailed consideration of Wildlife site within any plan to ensure that sites do not become fragmented as some sites are likely to be completely surrounded by development undertake habitat study to consider how to mitigate impact on the wildlife sites, retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development.</p>
3b. Protect and enhance landscapes?	X X	<p>A site of this size and in this location is likely to have a significant effect on landscape character. The site is located in LCA area 220 Weston Plateau Parklands, which is considered to be of moderate sensitivity, based on the enclosed quiet nature of the character. The evaluation of this LCA describes developments of greater than 5ha as not appropriate.</p> <p>The requirement for a dual carriageway to serve this area will be visible from the surrounding area, this will have a particularly negative impact on landscape.</p> <p>Mitigation – landscape assessments to minimise the impact on the countryside and enhance existing landscape features.</p>
3c. Conserve and, where appropriate, enhance the historic environment?	X	<p>Site contains Chesfield Archaeological Area.</p> <p>A northern link road to the development area could have a significant impact on the setting of the Graveley Conservation Area, Manor Farm (grade II listed), the Church of St Etheldreda (grade II* listed and a scheduled monument), Tile Kiln Farm (grade II listed) and Dane End Farm and Cottages (grade II listed) without appropriate mitigation measures. Tile Kiln and Dane End Farm may also be located within or adjacent to the development area, where again location of development, buffers and other mitigation measures would need to be considered.</p> <p>Mitigation – Archaeological and historical surveys. .</p>

3d. Reduce pollution from any source?	?	Possible contamination onsite. Site above SPZ 2 or 3 or a Principal Aquifer Class H1, H2, H3, HU, I1, I2 Development on a greenfield site will result in a loss of tranquillity for the area. New development will inevitably involve increased light, air and noise pollution. These impacts will need to be managed with appropriate mitigation measures. Rye Meads Water Cycle Study addresses impacts of the growth of Stevenage on the Rye Meads Sewage Treatment Works (and therefore on groundwater quality). This identified possible solutions up to 2021, however additional work was required past this date as the Water Framework Directive is likely to place more stringent controls on the water quality. In addition, measure such as water efficiency and SUDs will be important.
<i>Climate change</i>		
4. Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change	√	Flood risk is not identified as a problem within this area. However, there will be an increased pressure on water supply. The need for appropriate drainage through SUDs will be important in minimising the impacts. Significant opportunities for sustainable energy, given the size of the development.
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	X	Site is poorly related to North Herts needs, could meet requirements of Stevenage.
5b. Increase access to decent and affordable housing?	√	Site will provide 2000 - 5700 houses in North Hertfordshire, although an extension to Stevenage. A proportion will be affordable houses.
5c. Improve conditions and services that engender good health and reduce health	0	Initial construction phase would be disruptive for surrounding local residential areas. There would need to be controls to minimise this disruption. Health provision is likely to be provided within or adjacent to the development area.

inequalities?		
<i>Resource use and waste</i>		
6. Use natural resources efficiently; reuse, use recycled where possible?	X	Limiting the impact on natural resources will be important as without this large scale development has the potential to have a significant impact. Measures could include SUDs, recycling, sewage infrastructure, sustainable construction and building methods. There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads Water Cycle Study identifies potential solutions. Mitigation – ensure water efficiency in new development
<i>Town centres</i>		
7. Promote sustainable urban living?	X	The site is poorly related to North Hertfordshire. The location of the development also means that it is also poorly related to Stevenage. It is further north than Great Ashby, where residents are already separated from the Town's centre. Services in this area could compete with services in the town without appropriate controls. Travel by car is likely to be increased by this development.. Sustainable transport measures would need to be a priority in this location. On the positive side, North East Stevenage would be of an appropriate size to offer facilities such as schools, shops, community centres which would promote sustainable living.

Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> A site of this size is likely to be able to provide significant facilities within the development; the development would provide 2000 - 	<ul style="list-style-type: none"> This is a greenfield site, agricultural land grade 3; the 2011 Landscape Study describes developments of greater than 5ha as not 	<ul style="list-style-type: none"> Apply greenspace standards to ensure net benefit for greenspace Additional bus stops will be required to support sustainable

<p>5700 dwellings in North Hertfordshire; and</p> <ul style="list-style-type: none"> • there will be significant opportunities for sustainable energy, given the size of the development. 	<p>appropriate for this area;</p> <ul style="list-style-type: none"> • designated wildlife sites are included in the development area; • designated archaeological sites within the proposed site • Setting of historic assets impacted by possible access road; and • there are significant constraints on sewerage infrastructure in Stevenage. 	<p>transport, particularly into Stevenage</p> <ul style="list-style-type: none"> • a landscape study and mitigation measures will be needed; • undertake habitat study to consider how to mitigate impact on the wildlife site, retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development; • archaeological survey of site and surrounding area; • improvements to Rye Meads STW as outlined in Water Cycle Study; and • High levels of water efficiency in new homes and SuDS.
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Option 10: West of Stevenage

SA Objective: Will the policy...	Score	Justification for assessment including short, medium and long term issues and recommendations for mitigation / improvement
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	√	This option is likely to contribute more to Stevenage's economy rather than North Herts. The site would include provision for employment, would also provide additional workforce for Gunnels Wood employment area.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	X	The development is located on a greenfield site, although not particularly high in amenity value is grade 3 agricultural land.
2b. Provide access to green spaces?	√	There are existing public rights of way on the site that provide access to the countryside for the existing residents of Stevenage. However, the area is currently separated from Stevenage by the A1(M) and is relatively removed from the existing community. It is largely arable fields rather than accessible greenspace. Green space would be provided for within the development and would therefore bring greater access to these facilities. Access to the countryside would be further away for existing residents.

		<p>Greenspace within 400m. Rights of Way run through the site.</p> <p>Mitigation – apply green space standards to ensure positive benefit for greenspace. Potential to link into Stevenage Gateway and Hitchin Greenway to the North. Level 1 Green Link adjacent to the site, which the site can feed into. Creation of positive green gateway from the Level 2 Green Link to the east</p>
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	√	<p>A site of this size is likely to be able to provide significant facilities within the development. This would include new community facilities and potentially new public transport infrastructure, limiting the amount of trips generated by car. Additional employment within the site and its proximity to Gunnel Wood Industrial Area is also likely to help with limiting the need to travel. However, it is still likely that a significant proportion of new residents would work outside Stevenage and travel by car.</p> <p>Mitigation - inclusion of sustainable transport measures, including service to Stevenage station.</p>
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	X X	<p>Site includes Lucas Wood / High Broomin Wood / Upper Kitching Spring Wildlife Sites. Knebworth Woods SSSI is located to the south. Much of the site is arable fields and the boundary features are likely to have the greatest ecological value and provide wildlife corridors.</p> <p>Mitigation – detailed ecological surveys and appropriate mitigation measures to ensure that the impact on ecology is minimised. This will need to include consideration of the SSSI and wildlife site, retaining existing trees and hedgerows where appropriate, and seeking opportunities to enhance biodiversity.</p>

3b. Protect and enhance landscapes?	X	<p>The site is located on the edge of Langley Valley Landscape Character Area 214: recorded in the 2011 study¹¹ as overall of moderate sensitivity and visually or moderate / high sensitivity. The capacity for large urban extensions or new settlements in the Langley Valley LCA is considered to be low</p> <p>It is largely situated within Almshoe Plateau, (LCA 209) which the 2011 study¹² considers overall to be of low sensitivity and visually of moderate - low sensitivity; long distance views would be sensitive to introduction of development in this area. The capacity for large urban extensions or new settlements in the Almshoe Plateau is considered to be moderate.</p> <p>Mitigation – landscape assessments. The development would need to be planned in such a way as to limit the amount of development into the Langley Valley and minimise the impact on the landscape.</p>
3c. Conserve and, where appropriate, enhance the historic environment?	X	<p>Site contains designated archaeological sites. There are no significant historic buildings in the immediate area. However, there is a Grade 1 Listed building at Almshoe Bury to the North West.</p> <p>Mitigation – Archaeological assessment of site and surrounding area. Consideration of the impact on the setting of Almshoe Bury.</p>
3d. Reduce pollution from any source?	X	<p>There is a small area of contaminated land on the site, where appropriate remediation work would need to take place. Part of the site is above Source Protection Zone 2 and part above SPZ 3.</p> <p>Rye Meads Water Cycle Study addresses impacts of the growth of Stevenage on the Rye Meads Sewage Treatment Works (and therefore on groundwater quality). This identified possible solutions up to 2021, however additional work was required past this date as</p>

¹¹ See http://www.north-herts.gov.uk/214_2011-2.pdf

¹² See http://www.north-herts.gov.uk/209_2011-2.pdf

		the Water Framework Directive is likely to place more stringent controls on the water quality. In addition, measure such as water efficiency and SuDS will be important.
<i>Climate change</i>		
4. Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change	√	Surface water flooding is identified as an issue for the site. The southern edge of the site brushes flood zone 3. The need for appropriate drainage through SuDS will be important in minimising the impacts. Significant opportunities for sustainable energy, given the size of the development.
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	?	Site is poorly related to North Herts needs, could meet requirements of Stevenage. Affordable housing will open up opportunities for those not able to afford market housing.
5b. Increase access to decent and affordable housing?	√√	Site would provide 1700 - 3,100 houses in North Hertfordshire with a proportion of which being affordable.
5c. Improve conditions and services that engender good health and reduce health inequalities?	X	Initial construction phase would be disruptive for surrounding local residential areas. There would need to be controls to minimise this disruption. Site adjacent to A1, there may need to be noise attenuation in some areas and development to be an appropriate distance in relation to air quality and noise. Health provision is likely to be provided within the development area. Development on a greenfield site will result in a loss of tranquillity for the area, the further the development is away from the A1(M). New development will inevitably

		involve increased light, air and noise pollution. These impacts will need to be managed with appropriate mitigation measures.
<i>Resource use and waste</i>		
6. Use natural resources efficiently; reuse, use recycled where possible?	X	<p>Limiting the impact on natural resources will be important. Measures could include SuDS, recycling, sewage infrastructure, sustainable construction and building methods. There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads Water Cycle Study identifies potential solutions.</p> <p>Mitigation – ensure water efficiency in new development</p>
<i>Town centres</i>		
7. Promote sustainable urban living?	X	<p>The site is poorly related to North Hertfordshire. The location of the development on the opposite side of the A1 and the lack of notable access also means that it is also poorly related to Stevenage. Services onsite could compete with services in the town if the size and types of non-residential development is not controlled. Travel by car is likely to be increased by this development . Sustainable transport measures would need to be a priority in this location.</p> <p>On the positive side, West Stevenage would be of an appropriate size to offer facilities such as schools, shops, community centres which would promote sustainable living.</p>
Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> • A site of this size is likely to be able to provide significant facilities within the development. 	<ul style="list-style-type: none"> • This is a greenfield site, agricultural land grade 3. • It is likely that a significant proportion of 	<ul style="list-style-type: none"> • Apply greenspace standards to ensure net benefit for greenspace • additional bus stops will

<ul style="list-style-type: none"> • If developed in could provide 1,700 - 3100 dwellings in North Hertfordshire including significant affordable housing. • The site would include provision for employment, would also provide additional workforce for Gunnels Wood employment area. • There would be significant opportunities for sustainable energy, given the size of the development. • Greenspace is within 400m, and there would be significant opportunities for green infrastructure improvements. 	<p>new residents would work outside Stevenage and travel by car.</p> <ul style="list-style-type: none"> • The 2011 Landscape Study describes the capacity for developments of greater than 5ha as moderate. • Site includes a designated area of archaeological interest. • Designated wildlife sites are included in the development area, and Knebworth Woods SSSI is located to the south. • Part of site is within groundwater Source Protection Zone 2 and part above SPZ 3. • Potential surface water flooding issues onsite and the southern edge of the site brushes flood zone 3. • Potential contamination from former landfill use • There are significant constraints on sewerage infrastructure in Stevenage. A large new housing development will put increased pressure on the sewerage and water supply infrastructure, although the Rye Meads 	<p>be required to support sustainable transport, particularly into Stevenage</p> <ul style="list-style-type: none"> • a landscape study and mitigation measures will be needed; • undertake habitat study to consider how to mitigate impact on the wildlife site, retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development; • archaeological survey of site; • improvements to Rye Meads STW as outlined in Water Cycle Study; • high levels of water efficiency in new homes and SuDS; • Surface Water Management Plan: and • Construction Management Plan.
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	<p>Water Cycle Study identifies potential solutions.</p> <ul style="list-style-type: none"> • Site adjacent to A1(M), there may need to be noise attenuation in some areas and development to be an appropriate distance in relation to air quality and noise. For parts of the development away from the A1(M), there is likely to be increased light, air and noise pollution. 	
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North of Baldock

(BA1 – formerly site 200)

SA Objective: Will the site...		Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
	Score	
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	?	<ul style="list-style-type: none"> • Site could provide large scale development which would support existing services as well as provide new ones. • Area incorporates land previously identified for employment uses, although development of this scale could still incorporate

		some employment uses.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	X X	<ul style="list-style-type: none"> • Greenfield site • Site is located on Grade 2 and 3 agricultural land
2b. Provide access to green spaces?	√	<ul style="list-style-type: none"> • Site is adjacent to existing open space to the west (Ivel Springs), although the most eastern extent of the site is approximately 2km from this • Development of this area will mean existing residents of North Baldock will be further away from accessible open countryside. • The scale of the development will mean open space is provided onsite, leading to positive effects in the medium to long term. • Mitigation – Protection and expansion of existing rights of Way, and other green infrastructure recommendations in the 2013 Landscape Sensitivity Study. Site provides opportunity to contribute towards Baldock Greenway Green infrastructure project and proximate strategic green links providing opportunity to enhance existing recreational amenity.
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	√?	<ul style="list-style-type: none"> • The southern part of the site is within 400m of a bus stop (though service is less frequent than hourly in the day) and 800m of train station, however the site extends north, to the point where the boundary is 1500m from the station. • The railway line forms a barrier for pedestrian and cycle access to schools the town centre and other facilities, however a development of this scale is likely to provide public transport facilities within the short to medium term, and could provide new infrastructure to bridge the barrier. • Mitigation – public transport links within the development, particularly linking to Baldock station

<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	?	<ul style="list-style-type: none"> • The site contains Baldock Road Verge Wildlife site and Ivel Springs is located adjacent to the west. • The site is large and contains numerous tree belts and hedgerows and any development will reduce the habitats of existing species. • Mitigation – A development of this size will require an ecological assessment and the development should include features such as green corridors, green roofs to ensure a net gain for biodiversity. Wildlife site should be protected and enhanced within the wider development.
3b. Protect and enhance landscapes?	X ?	<ul style="list-style-type: none"> • The 2013 Landscape Sensitivity Report¹³ identifies the areas to the north of the site as having moderate to high sensitivity and areas adjacent to the railway line as having moderate to low sensitivity. The report includes a number of specific detailed recommendations¹⁴ to minimise the landscape impact. These include ensuring that any development to the north of Bygrave Road should be set back from the public right of way between the road and the Common, leaving a green buffer strip to either side of the hedgerows. Likewise it recommends that there should be a suitable open, buffer strip between any new housing and the arable farmland. It further recommends that Bygrave Road / Ashwell Road has a rural character which should as far as possible be retained. It is noted that the development area proposed is smaller than the site considered in the Landscape Capacity Study and addresses the Study's

¹³ Land north of Baldock: Landscape sensitivity study, LUC, July 2013

¹⁴ See http://www.north-herts.gov.uk/12_baldock_landscape_sensitivity_report.pdf

		<p>recommendations on developing below the ridge-line and in relation to existing settlements. These recommendations may reduce the severity of the negative effect in the long term.</p> <ul style="list-style-type: none"> • Mitigation – landscape assessments to minimise the impact on the countryside and enhance existing landscape features and pattern, taking account of the recommendations of the Capacity Study.
3c. Conserve and, where appropriate, enhance the historic environment?	X	<ul style="list-style-type: none"> • The site includes four designated areas of archaeological significance • The site is not located near a conservation area • Site is adjacent to Ivel Springs Ancient Monument • Mitigation – undertake a detailed archaeological survey, ensure protection of ancient monument
3d. Reduce pollution from any source?	?	<ul style="list-style-type: none"> • Site is not located in a Source Protection Zone • Some contaminated land likely within the site from multiple industrial uses • Mitigation – contaminated land survey and treatment of contamination as required
<i>Climate change</i>		
4a. Reduce greenhouse gas emissions and Improve the Districts ability to adapt to climate change	√	<ul style="list-style-type: none"> • Site not in a flood risk area • SuDS likely to be viable according to the SuDS viability Plan (though there may be constraints in a small part of the site) • Significant opportunities for sustainable energy measures, given the size of the development • Potential surface water flooding issues onsite • Investigate further the potential for surface water flooding, and if necessary prepare a Surface Water Management Plan

<i>A just society</i>		
5a. Share benefits of prosperity fairly?	√	<ul style="list-style-type: none"> • Additional residents would support local services and facilities. The development is also likely to be required to provide new facilities such as schools, nurseries, shops and a community centre, which could also serve surrounding rural area. • The town is not identified as being deprived
5b. Increase access to decent and affordable housing?	√√	<ul style="list-style-type: none"> • The estimated number of dwellings will provide a significant proportion of affordable housing.
5c. Improve conditions and services that engender good health and reduce health inequalities?	X	<ul style="list-style-type: none"> • The site includes the railway line, which could create noise pollution • In the short term, the construction phase would create noise and other disruption for surrounding local residential areas. • Development of this large greenfield site will inevitably involve increased light, air and noise pollution. • Mitigation – noise and vibration should be considered by site design and landscaping and a Construction Management Plan should be produced in liaison with the local council and local residents. Review how to reduce impacts on existing residents through appropriate landscaping and green infrastructure.
<i>Resource use and waste</i>		
6. Use natural resources efficiently; reuse, use recycled where possible	?	<ul style="list-style-type: none"> • The July 2013 Infrastructure Paper¹⁵ notes that it will be necessary to consider the water and sewerage impacts of a development of this size, although there are currently no known constraints.

¹⁵ Infrastructure for Larger Additional Location Options –see http://www.north-herts.gov.uk/infrastructure_for_larger_additional_location_options-3.pdf

		<ul style="list-style-type: none"> • For a development of this scale limiting the impact on natural resources will be important, Measures could include SuDS, recycling, sustainable construction and building methods • Mitigation – ensure water efficiency in new development and use of SuDS • Mitigation - utilities assessment and further work with infrastructure providers
<i>Town centres</i>		
7. Promote sustainable urban living?	?	<ul style="list-style-type: none"> • The southern part of site is located in relative close proximity to the town centre and to bus stops and the train station, however the railway line forms a obvious barrier from the rest of the town. A development of this size may be able to fund transport connections which will make the centre of town more accessible.

Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> • Will provide over 2800 dwellings, a significant proportion of which will be affordable housing • The southern part of the site is within 400m of a bus stop and 800m of train station, and a development of this size is likely to be able to support an improved bus service. • The scale of the development will mean open space is provided onsite. It will give opportunities to improve and expand existing rights of way and adjacent green links • Significant opportunities for sustainable 	<ul style="list-style-type: none"> • Incorporates land previously identified for employment uses, although development of this scale could still incorporate some employment uses. • Large greenfield site grade 2/3 agricultural land • The site contains Baldock Road Verge Wildlife site and includes hedgerows and trees • Site will reduce access to countryside for north Baldock residents. • A development of this size is likely to have significant impact. The 2013 Landscape Sensitivity Report identifies the areas to 	<ul style="list-style-type: none"> • Protect and develop footpaths and contribute to Baldock Greenway green infrastructure, taking account of recommendations of 2013 Landscape Sensitivity Study • Improved public transport links, particularly to the station • Ecology assessment and green design • Landscape assessment taking account of recommendations of Capacity Study • Archaeological survey • Surface Water Management Plan • Noise and vibration considered in design

<p>energy measures, given the size of the development.</p> <ul style="list-style-type: none"> • Additional residents would support local services and facilities, and the town centre. The development is also likely to be required to provide new facilities such as schools, nurseries, shops and a community centre. 	<p>the north of Bygrave Road as having moderate to high sensitivity and areas adjacent to the railway line as having moderate to low sensitivity.</p> <ul style="list-style-type: none"> • Includes 4 designated areas of archaeological significance, and is adjacent to Ivel Springs Ancient Monument. • Some of site is adjacent to the railway line, with potential noise and vibration issues. • Railway line creates barrier with the rest of the town for pedestrian and cycle access. • Potential surface water flooding issues onsite • Potential contamination from multiple industrial uses. • Initial construction phase would create noise and other disruption for surrounding local residential areas. • Development of this large greenfield site will inevitably involve increased light, air and noise pollution. 	<ul style="list-style-type: none"> • Construction Management Plan • Water efficiency and use of SuDS • Further work with infrastructure providers • Contaminated land survey • Review how to reduce impacts on existing residents through appropriate landscaping and green infrastructure.
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North East Luton (EL3)

(previously site 212a)

SA Objective: Will the site...	Score	Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	?	<ul style="list-style-type: none"> If Century Park is developed, there is potential for employment development in conjunction with housing, however, this development on its own does not incorporate any employment land.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	X X	<ul style="list-style-type: none"> Greenfield site Site located on Grade 3 agricultural land This area is considered to have generally high value based on its proximity to the AONB.
2b. Provide access to green spaces?	?	<ul style="list-style-type: none"> The development is on the edge of the settlement and contains rights of way, meaning that access to the open countryside would be further away for existing residents of Luton / Mangrove Green / Cockernhoe A development of this scale is likely to provide opportunities for additional greenspace, however the specific details are not yet known. Some forms of Greenspace are within 400m. Rights of Way run through the site.

		<ul style="list-style-type: none"> Mitigation – apply green space standards to ensure positive benefit for greenspace and recreational amenity. Ensure existing ROW are maintained. Development should ensure that existing residents continue to have access to open space and loss of existing greenspace does not negatively affect overall provision. There is an opportunity to connect historic parks and gardens into public footpaths and into existing Level 2 Green Link heading east toward Stevenage.
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	X	<ul style="list-style-type: none"> A site of this size is likely to be able to provide significant facilities within the development, including bus links, and could be linked with new employment opportunities. However, the site is a long distance from the Luton town centre and the topography is undulating, which would be a discouragement to walking or cycling into the town. The site is over 3km from Luton station, so residents are likely to use private vehicles to commute and access services in Luton. The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment Local road network to the east is substandard, development in this area will make issue worse Mitigation - inclusion of sustainable transport measures, minimise access to existing road network to the east. Inclusion of new road infrastructure
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	X/?	<ul style="list-style-type: none"> Vegetation present in the form of overgrown tree belts, hedgerows and grassed areas – development of the site is likely to have an initial negative impact. Mitigation – ecological survey and seek to maintain existing trees and hedgerows in development and seek opportunities for ensuring a net gain for biodiversity
3b. Protect and enhance landscapes?	X X	<ul style="list-style-type: none"> A site of this size and scale in this location is likely to have a significant visual impact on landscape. The site is located on top of the plateau ridge and so will impact on surrounding views of the site. and will lead to the coalescence of Luton with nearby villages. The site is located within Landscape Character Area 202 Breachwood Green Ridge, which is

		<p>considered in the 2011 landscape assessment¹⁶ to have a moderate sensitivity. However the study also suggests that the landscape capacity for urban extensions greater than 5ha is low to moderate. The site is also close to the AONB.</p> <ul style="list-style-type: none"> • Other landscape studies have also been undertaken of the proposed development area (including sites EL1, EL2 and EL3), in particular a LUC report in 2008¹⁷ and a review of the LUC report in 2009. The 2009 report notes that development of the scale proposed would have significant impacts on the landscape character and the visual and recreational resource, as well as local villages. The proposed extent of the development has since been reduced, and in particular the proposed development area is now set below the ridge line visible from Lilley Bottom in order to avoid devaluing the quality of the Lilley Bottom Character Area. However, it is still likely that development of this scale will have a significant impact on the landscape. • Mitigation – landscape assessments to minimise the impact on the countryside and enhance existing landscape features and pattern, taking account as far as possible of the guidelines in the 2011 study.
3c. Conserve and, where appropriate, enhance the historic environment?	X	<ul style="list-style-type: none"> • Site includes Mangrove Green and Cockernhoe archaeological area. Site also close to Mangrove Hall Listed Buildings. • Mitigation - Archaeological survey of the site and surrounding area. • Mitigation – sensitivity to the setting of historic buildings through design
3d. Reduce pollution from any source?	0	<ul style="list-style-type: none"> • Site located above Source protection Zone 3. Site unlikely to be contaminated.
<i>Climate change</i>		

¹⁶ See http://www.north-herts.gov.uk/202_2011.pdf

¹⁷ The first report was Environmental Sensitivity Assessment Supplementary Report (LUC December 2008) and this was reviewed in 2009 by the Landscape Partnership – see http://www.north-herts.gov.uk/east_of_luton_final_report_all.pdf

4 Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change?	√	<ul style="list-style-type: none"> • Potential surface water flooding issues onsite. There are constraints on the use of SUDS according to the SUDS viability plan, however other alternatives for SuDS should be sought. • Opportunities for sustainable energy, given the size of the development, particularly in conjunction with EL1 and EL2.
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	√	<ul style="list-style-type: none"> • Site is poorly related to Luton and North Hertfordshire, although could provide housing for deprived areas of Luton in the medium to long term.
5b. Increase access to decent and affordable housing?	√	<ul style="list-style-type: none"> • Site would provide 700 houses in North Hertfordshire a proportion of which would be affordable.
5c. Improve conditions and services that engender good health and reduce health inequalities?	X	<ul style="list-style-type: none"> • Initial construction phase would be disruptive for surrounding residents • The site is close to Luton noise contours • Development of this large greenfield site will inevitably involve increased light, air and noise pollution. <p>Mitigation: Construction Management Plan. Review noise impacts on potential residents, and incorporate mitigation within development.</p>
<i>Resource use and waste</i>		
6. Use natural resources efficiently; reuse, use recycled where possible	?	<ul style="list-style-type: none"> • Limiting the impact on natural resources will be important. The Environment Agency has identified that the STW is constrained on all sides. Should upgrades be required, this is a constraint to development. Not currently clear if upgrades are required or not. • Mitigation - Further discussion with EA and Water companies • Mitigation – ensure water efficiency in new development and use of SuDS
<i>Town centres</i>		

7. Promote sustainable urban living?	X	<ul style="list-style-type: none"> Site unlikely to contribute to town centre based on its out of town location, although there are local centres in closer proximity that it may serve.
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Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> Site would provide 700 additional dwellings in North Hertfordshire including significant affordable housing Green space is within 400m of the site. Opportunity for sustainable energy solutions onsite in conjunction with EL1 and EL2. A site of this size is likely to be able to provide significant facilities within the development. Opportunity to connect historic parks and gardens into public footpaths and into existing Green Link heading east toward Stevenage. 	<ul style="list-style-type: none"> This is a greenfield site, agricultural land grade 3. Site includes designated archaeological area The area provides recreation space for existing residents of Luton, Cockernhoe. A site of this size and scale in this location is likely to have a significant impact on the landscape character and on local villages. Constraints on use of SuDS. Potential surface water flooding issues onsite. The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment Local road network to the east is sub-standard, development in this area will make this worse, and reduce accessibility for existing residents. Initial construction phase would be likely to create noise and other disruption for surrounding local residential areas. Development of this large greenfield site will inevitably involve increased light, air and noise pollution. 	<p>Investigate use of SuDS or alternatives throughout development;</p> <p>Apply green space standards to ensure positive benefit for greenspace provision;</p> <p>Archaeological survey of the site and surrounding area;</p> <p>Landscape assessment</p> <p>Inclusion of sustainable transport measures</p> <p>Work with EA and Water companies re Sewage Treatment Works;</p> <p>Retain existing trees and hedgerows, and seek opportunities to benefit biodiversity through the development</p> <p>Consideration of noise contours from Luton airport;</p> <p>Water efficiency and SuDS;</p> <p>Potential contribution to Green Infrastructure Project ST9;</p>

		Surface Water Management Plan: Construction Management Plan.
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North East Luton (212b and 212c)

SA Objective: Will the site...	Score	Justification for assessment including short medium and long term issues and recommendations for mitigation / improvement
<i>Economic Activity</i>		
1. Achieve sustainable levels of prosperity and economic growth?	?	<ul style="list-style-type: none"> If Century Park is developed, there is potential for employment development in conjunction with housing, however, this development on its own does not incorporate any employment land.
<i>Land use and development patterns</i>		
2a. Minimise the development of greenfield land and other land with high environmental and amenity value?	X X	<ul style="list-style-type: none"> Greenfield site Site located upon Grade 3 agricultural land This area is considered to have generally high value based on its proximity to the AONB.
2b. Provide access to green spaces?	√	<ul style="list-style-type: none"> The development is on the edge of the settlement and contains rights of way, meaning that access to the open countryside would be further away for existing residents of Luton / Mangove Green / Cockernhoe Site 212b would provide significant greenspace and opportunity for wider links to green infrastructure Existing greenspace is within 400m. Rights of Way run through the site. Mitigation – apply green space standards to ensure positive benefit for greenspace and recreational amenity. Ensure existing ROW are

		maintained. Development should ensure that existing residents continue to have access to open space and loss of existing greenspace does not negatively affect overall provision. There is an opportunity to connect historic parks and gardens into public footpaths and into existing Level 2 Green Link heading east toward Stevenage.
2c. Deliver more sustainable location patterns and reduce the use of motor vehicles?	X	<ul style="list-style-type: none"> • A site of this size is likely to be able to provide significant facilities within the development, including bus links, and could be linked with new employment opportunities. However, the site is a long distance from the Luton town centre and the topography is undulating, which would be a discouragement to walking or cycling into the town. The site is over 3km from Luton station, so residents are likely to use private vehicles to commute and access services in Luton. • The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment • Local road network to the east is substandard, development in this area will make issue worse • Mitigation - inclusion of sustainable transport measures, minimise access to existing road network to the east. Inclusion of new road infrastructure
<i>Environmental protection</i>		
3a. Protect and enhance biodiversity?	?/√	<ul style="list-style-type: none"> • Vegetation present in the form of overgrown tree belts, hedgerows and grassed areas • Site 212b would provide significant greenspace and opportunity for wider links to green infrastructure, which may have a positive effect on biodiversity in the medium to long term. • Mitigation – ecological survey and seek to maintain existing trees and hedgerows in development ensuring a net gain for biodiversity
3b. Protect and enhance landscapes?	X X	<ul style="list-style-type: none"> • A site of this size and scale in this location is likely to have a significant visual impact on landscape. The site is located on top of the plateau ridge and so will impact on surrounding views of the site. and will lead to the coalescence of Luton with nearby villages. The site is located within Landscape Character Area 202 Breachwood

		<p>Green Ridge, which is considered in the 2011 landscape assessment¹⁸ to have a moderate sensitivity. However the study also suggests that the landscape capacity for urban extensions greater than 5ha is low to moderate. The site is also close to the AONB.</p> <ul style="list-style-type: none"> • Other landscape studies have also been undertaken of the proposed development area (including sites EL1, EL2 and EL3), in particular a LUC report in 2008¹⁹ and a review of the LUC report in 2009. The 2009 report notes that development of the scale proposed would have significant impacts on the landscape character and the visual and recreational resource, as well as local villages. Whereas the proposed development in EL3 (previously 212a) is below the ridge line visible from Lilley Bottom, sites 212b and 212c will be visible, thus devaluing the quality of the Lilley Bottom Character Area. • Mitigation – landscape assessments to minimise the impact on the countryside and enhance existing landscape features and pattern. Development into the valley bottom will be particularly visible and difficult to mitigate
3c. Conserve and, where appropriate, enhance the historic environment?	X	<ul style="list-style-type: none"> • Site includes Mangrove Green and Cockernhoe archaeological area. Site also close to Mangrove Hall Listed Buildings. • Site borders Putteridge Bury Historic Park and Gardens • Mitigation - Archaeological survey of the site and surrounding area. • Mitigation – sensitivity to the setting of historic buildings through design
3d. Reduce pollution from any source?	0	<ul style="list-style-type: none"> • Site unlikely to be contaminated.

¹⁸ See http://www.north-herts.gov.uk/202_2011.pdf

¹⁹ The first report was Environmental Sensitivity Assessment Supplementary Report (LUC December 2008) and this was reviewed in 2009 by the Landscape Partnership – see http://www.north-herts.gov.uk/east_of_luton_final_report_all.pdf

<i>Climate change</i>		
4 Reduce greenhouse gas emissions and improve the districts ability to adapt to climate change?	√	<ul style="list-style-type: none"> • Potential surface water flooding issues onsite. There are constraints on the use of SUDS according to the SUDS viability plan, however other alternatives for SuDS should be sought. • Opportunities for sustainable energy, given the size of the development, particularly in conjunction with EL1 and EL2.
<i>A just society</i>		
5a. Share benefits of prosperity fairly?	√	<ul style="list-style-type: none"> • Site is poorly related to Luton and North Hertfordshire, although could provide housing for deprived areas of Luton in the medium to long term. Site is poorly related to Luton and North Hertfordshire, although could provide housing for deprived areas of Luton in the medium to long term.
5b. Increase access to decent and affordable housing?	√	<ul style="list-style-type: none"> • Site 212c would provide 600 additional dwellings in North Hertfordshire, including affordable housing
5c. Improve conditions and services that engender good health and reduce health inequalities?	X	<ul style="list-style-type: none"> • Initial construction phase would be disruptive for surrounding residents • The site is close to Luton noise contours • Development of this large greenfield site will inevitably involve increased light, air and noise pollution. • Mitigation: Construction Management Plan. Review noise impacts on potential residents, and incorporate mitigation within development
<i>Resource use and waste</i>		

6. Use natural resources efficiently; reuse, use recycled where possible	?	<ul style="list-style-type: none"> Limiting the impact on natural resources will be important. The Environment Agency has identified that the STW is constrained on all sides. Should upgrades be required, this is a constraint to development. Not currently clear if upgrades are required or not. Mitigation - Further discussion with EA and Water companies Mitigation - ensure water efficiency in new development and use of SuDS
<i>Town centres</i>		
7. Promote sustainable urban living?	X	<ul style="list-style-type: none"> Site unlikely to contribute to town centre based on its out of town location, although there are local centres in closer proximity that it may serve.

Key positive effects	Key negative effects	Potential mitigation
<ul style="list-style-type: none"> Site 212c would provide 600 additional dwellings in North Hertfordshire, including affordable housing Site 212b would provide significant greenspace and opportunity for wider links to green infrastructure, with and improvements to biodiversity Opportunity for sustainable energy solutions if linked with other east of Luton developments A site of this size is likely to be able to provide significant facilities within the development. 	<ul style="list-style-type: none"> This is a greenfield site, agricultural land grade 3 Both sites include designated archaeological area Site borders Putteridge Bury Historic Park and Gardens The area provides recreation space for existing residents of Luton, Cockernhoe. A site of this size and scale in this location is likely to have a significant visual impact on landscape. The site is located on top of the plateau ridge and so will impact on surrounding views of the site, particularly from Lilley Bottom. Constraints on use of SuDS. Potential surface water flooding issues onsite. 	<p>Use of SuDS throughout development;</p> <p>Apply green space standards to ensure positive benefit for greenspace provision;</p> <p>Archaeological survey of the site and surrounding area;</p> <p>Landscape assessment</p> <p>Inclusion of sustainable transport measures</p> <p>Work with EA and Water companies re Sewage Treatment Works;</p> <p>Retain existing trees and</p>

	<ul style="list-style-type: none"> • The likelihood is that residents of this development will drive to Luton / Hitchin for work and entertainment. • Local road network to the east is sub-standard, development in this area will make this worse, and reduce accessibility for existing residents. • Initial construction phase would be likely to create noise and other disruption for surrounding local residential areas. • Development of this large greenfield site will inevitably involve increased light, air and noise pollution. 	<p>hedgerows, and seek opportunities to benefit biodiversity through the development</p> <p>Consideration of noise contours from Luton airport; and Water efficiency and SuDS.</p> <p>Potential contribution to Green Infrastructure Project ST9</p> <p>Surface Water Management Plan: Construction Management Plan.</p>
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